

Attorney Docket No. YOR920010407US1

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Patent Application**

Applicant(s): C.-S. Li et al.

Case: YOR920010407US1

Serial No.: 09/896,584

Filing Date: June 29, 2001

Group: 3627

Examiner: Asfand M. Sheikh

Title: Methods and Apparatus for Automatic Replenishment of Inventory  
Using Embedded Sensor System and Electronic Marketplace

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REPLY BRIEF

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants (hereinafter "Appellants") submit this Reply Brief under 37 C.F.R. §1.193(b)(1) in response to the Examiner's Answer mailed on July 21, 2008, relating to the Appeal Brief filed by Appellants on June 2, 2008, appealing the non-final rejection dated September 25, 2007 of claims 1-4, 7-10, 13, 15-18, and 21-26 of the above-identified application.

ARGUMENT

In the Examiner's answer, the Examiner reasserts that claims 1-4, 7-10, 13, 15-18, and 21-26 are not patentable over the cited references. Appellants respectfully disagree with the assertions presented by the Examiner in the Answer, for at least the reasons identified below, as well as for those reasons previously set forth in the Appeal Brief.

With regard to the §103 rejection of independent claims 1, 15, and 25, the Examiner states on pages 9-10 of the Examiner's Answer:

The examiner sought to combine Shkedy to teach an electronic market place, more specifically, the electronic market place comprises an electronic trading network site (col. 3, lines 39-56); ordering a quantity of inventory via the electronic market place (col. 5, lines 7-16); and a broker device one of aggregating and deaggregating multiple orders for the inventory as to minimize an overall purchasing cost attributable to the multiple orders (col. 4, lines 48-59 and col. 8, lines 50-54). The examiner used the combination of both Salvo in view of Shkedy to teach the recited claim.

Appellants acknowledge the Examiner's attempt to combine Salvo and Shkedy to reject the claims; however, Appellants disagree, specifically, with the manner in which the Examiner combines Salvo and Shkedy.

The Examiner concedes that Salvo does not teach an electronic marketplace. Examiner's Answer, pg. 9, lines 8-9. However, the Examiner believes that by finding a reference which may generally allude to an electronic marketplace (e.g., Shkedy), the Examiner can simply insert the words "electronic marketplace" into Salvo to construct a §103 rejection. Appellants submit that the recited limitation of an electronic marketplace is very specific and the limitation cannot be reasonably combined into Salvo as argued by the Examiner.

Appellants submit that the Examiner is not simply trying to use a secondary reference to add, for example, a known step that is not taught by a primary reference. Rather, the Examiner is trying to unfairly change the disclosed teachings of the primary reference by inserting a term that is not described by the primary reference. Independent claim 1 specifically recites, "the at least one broker device automatically accessing at least one electronic marketplace, wherein the electronic marketplace comprises an electronic trading network site, the broker device accessing the electronic

marketplace in order to: (1) obtain information to determine one or more optimal parameters, based on the collected status information, to be used for replenishing the at least one inventory item via the at least one electronic marketplace; and (2) order a quantity of the inventory item via the electronic marketplace from a provider of the inventory item” (emphasis added). Salvo does not teach at least one broker device automatically accessing at least one electronic marketplace, wherein the electronic marketplace comprises an electronic trading network site. Nor does Salvo disclose a broker device “accessing the electronic marketplace in order to . . . .” Appellants submit that the claims recite specific steps involving an electronic marketplace and the Examiner cannot simply combine the idea of an electronic marketplace with Salvo to teach the specific steps of the recited claims.

Appellants specifically note that the Examiner attempts to bypass the recited phrase “electronic marketplace” by inserting his own phrase “at least one inventory price source” when tailoring his arguments based on Salvo. Examiner’s Answer, pg. 9, lines 9-15. Afterwards, the Examiner argues that Shkedy teaches an electronic marketplace, and therefore, the combined references teach the claimed limitations. Assuming *arguendo* that Shkedy does disclose an electronic marketplace as recited in the claims and described in the specification (see Specification, pg. 3, lines 2-14), Appellants submit that the Examiner is unfairly manipulating words and changing the teachings of Salvo to read on the recited claims. In this respect, individually or in combination, the cited references do not teach the recited claims. It follows that in contrast to the Examiner’s argument on page 10, first full paragraph of the Examiner’s Answer, it would not have been obvious to combine Salvo and Shkedy to produce the recited limitations.

Appellants respectfully assert that the Examiner’s technique of mixing parts of references together to reject the recited claims resembles a hindsight-based piecemeal analysis. See, e.g., Princeton Biochemicals, Inc. v. Beckman Coulter, Inc., 411 F.3d 1332, 1337, 75 USPQ2d 1051, 1054 (Fed. Cir. 2005) (“[I]n making the assessment of differences between the prior art and the claimed subject matter, section 103 specifically requires consideration of the claimed invention ‘as a whole.’ . . . Without this important requirement, an obviousness assessment might successfully break an invention into its component parts, then find a prior art reference corresponding to each component. This line of reasoning would import hindsight into the obviousness determination by

using the invention as a roadmap to find its prior art components.”); Ruiz v. A.B. Chance Co., 357 F.3d 1270, 1275, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004) (“The ‘as a whole’ instruction in [35 U.S.C. §103(a)] prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. . . . Section 103 precludes this hindsight discounting of the value of new combinations by requiring assessment of the invention as a whole.”).

In this case, it appears that the Examiner, in formulating the obviousness rejection, came across the components of reference A (Salvo) and reference B (Shkedy) using the Appellants’ invention as a roadmap. For at least these reasons, Appellants believe that the §103 rejection is invalid.

In response to the Examiner’s argument with regard to the recited limitation of “aggregating and deaggregating multiple orders for the inventory item associated with the one or more sources so as to minimize an overall purchasing cost attributable to the multiple orders,” Appellants reiterate the arguments made in the Appellants’ Appeal Brief. Furthermore, Appellants disagree with the Examiner’s argument that Shkedy teaches deaggregating as recited in the claims. Examiner’s Answer, pg. 12, lines 5-23. Deaggregating is described in the specification in an illustrative embodiment at, for example, page 9, lines 23-24: “by deaggregating the data, the broker may be able to take advantages of purchasing opportunities on smaller quantities.”

In contrast to the Examiner’s argument, Shkedy, col. 15, lines 42-57, does not describe deaggregating. Rather, Shkedy is describing a pooling process. Further, Appellants respectfully submit that the Examiner’s argument stating that Shkedy teaches deaggregating at Shkedy, col. 2, lines 42-58, is a mischaracterization of the Shkedy reference. Examiner’s Answer, pg. 12. Shkedy is once again describing the pooling process and how you must bind individual buyers to a pool before a purchase is made because if a buyer participates in a pool and has the ability to decide whether they wish to purchase goods after getting a price, it becomes impossible to guarantee prices. Next, Appellants assert that the Examiner’s note on page 12, lines 15-18 of the Examiner’s Answer, is an unsupported assumption regarding the Shkedy reference: “as buyers leave the pool the pool has to be updated again with a new disaggregated price for the remainder of individuals in the pool.” No

where does Shkedy disclose updating with a new deaggregated price for the remainder of individuals in the pool.

For at least these reasons, the cited references fail to teach deaggregating as recited in the claims. Further, the Examiner has not presented a clear argument that a person having ordinary skill in the art could have combined Salvo and Shkedy to produce the recited limitation of deaggregating multiple orders for the inventory item associated with the one or more sources so as to minimize an overall purchasing cost attributable to the multiple orders. Accordingly, the cited references do not render the recited claims obvious.

With regard to the §103(a) rejection of claims 10 and 24, Appellants reassert that the combination of Salvo and Shkedy fail to teach or suggest all of the limitations of the independent claims. It follows that dependent claims 10 and 24 are patentable due to their dependence of independent claims 1 and 15. Appellants further assert that Whiteis fails to remedy the deficiencies of Salvo and Shkedy as discussed above. In addition, Appellants contend that claims 10 and 24 recite patentable subject matter in their own right.

Claim 10 recites, automatically generating a recommendation of at least one of a different brand and a different type of an item to a consumer of the inventory. Claim 24 recites similar subject matter. An illustrative embodiment of automatically generating a recommendation may be found in the specification at, for example, page 14, line 25, to page 15, line 12:

Accordingly, FIG. 5 is a flow diagram illustrating a process 500 of automatic generation of recommendations for new brands/types of merchandise in an automatic inventory replenishment system according to an embodiment of the present invention. Specifically, FIG. 5 illustrates an automatic methodology for introducing new items in such an automatic replenishment environment. It is to be appreciated that, in one embodiment, the recommendations may be made by a broker to an end consumer via a gateway.

First, user preference is collected in step 501 either explicitly (e.g., such as through specification of a user profile stored at a broker) or implicitly (e.g., such as through mining usage behavior from the sensors as mentioned above). In step 502, a set of recommendation rules relating to new brands 504 and/or items 505 are then generated based on these explicitly or implicitly generated rules. This recommendation generation step may be similar to collaborative filtering processes,

such as those that are known to be used for promotion, upsale, and cross-sale. A small quantity of the recommended merchandise is then ordered in step 503. The usage pattern of these newly ordered items is then monitored, in step 506, and the monitoring results used to revise the user profile.

Appellants respectfully assert that Whiteis fails to disclose generating a recommendation of at least one of a different brand and a different type of an item to a consumer of the inventory as recited in claims 10 and 24.

Appellants note that Whiteis discloses recommending items, such as music or movies, to a user (e.g., a movie purchaser or renter). Whiteis, col. 1, lines 5-60; and Whiteis, col. 6, lines 60, to col. 7, line 20. Regardless of this fact, the Examiner boldly equates the selection of movies (Whiteis, FIG. 8) to generating a recommendation of at least one of a different brand and a different type of an item to a consumer of the inventory. Whiteis is not recommending items of a different brand and/or a different type to a consumer of an inventory.

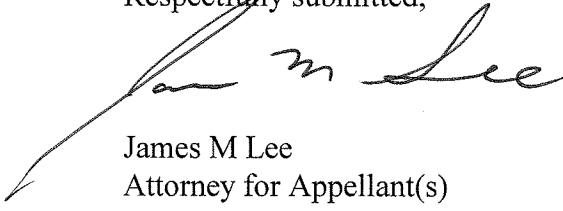
The Examiner states on page 15, lines 4-6 of the Examiner's Answer: "Further the examiner notes FIG. 8, the items represent movies which would be different brands based on the different studios that have produced a given movie." Appellants respectfully submit that this statement is another mischaracterization of a cited reference. Figure 8 of Whiteis illustrates linked movie titles. No where in the text or in the figures does Whiteis disclose 'different brands based on the different studios that have produced a given movie.' Therefore, the Examiner's attempt to equate the claim language to Whiteis is unfounded.

For at least these reasons, Whiteis fails to teach the limitations of claims 10 and 24. Further, Appellants submit that there is no suggestion or motivation to combine or modify the cited references. In contrast to the Examiner's argument on page 15, first partial paragraph, it would not have been obvious to combine Salvo, Shkedy, and Whiteis because Whiteis is unrelated to Salvo (i.e., inventory management) and Shkedy (i.e., facilitating buyer-driven purchase orders on a commercial network system). Accordingly, the cited references do not render the recited claims obvious.

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For the reasons stated above and those previously provided in Appellants' Appeal Brief, Appellants respectfully request withdrawal of the rejections of claims 1-4, 7-10, 13, 15-18, and 21-26. As such, the application is asserted to be in condition for allowance, and favorable action is respectfully solicited.

Respectfully submitted,

  
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Date: September 22, 2008